



## **Duplicate Client and Dose Records in the NDIIS**

North Dakota Department of Health (NDDoH) immunization program staff are getting an increasing number of requests to combine duplicate client records and to delete duplicate dose records from the North Dakota Immunization Information System (NDIIS). Duplicate records are being created due to the increasing number of providers submitting data to the NDIIS electronically from their electronic health record (EHR) system. The majority of duplicate clients are due to having hyphenated names, differences in name spelling and clients that have a name suffix (i.e. Jr., Sr.). The electronic messaging system requires an exact match, based on first name, last name and birthdate, between the EHR and NDIIS or it will create a new NDIIS record. Interoperable providers are also choosing to enter all historical dose records from the NDIIS into their EHR system, which then sends the dose record back to the NDIIS creating duplicate doses. In an effort to standardize our process and to reduce the amount of staff time spent on de-duplication, the procedures and schedules for the correction of both client and dose level duplicates are outlined below.

### *Client Duplicates*

When a duplicate client record is found in the NDIIS, providers should type the word "DUPLICATE" into the second address line of the client demographics page. Every Thursday, NDDoH staff will run a report looking for clients marked as duplicate in the NDIIS and will combine those records every Friday. NDDoH staff will no longer be accepting reports of duplicate client records via email or phone.

In an effort to reduce the number of duplicate records created, the NDDoH suggests that providers use a space not a "-" for a hyphenated last name (i.e., Smith Johnson not Smith-Johnson), put a space between in the first name if a client has two first names (i.e. Mary Jane, not MaryJane) and putting Jr., Sr., III, etc. as a suffix and not as part of the last name.

### *Dose Duplicates*

In April 2014, a vaccine level de-duplication system was implemented in the NDIIS. This system evaluates all doses added to NDIIS client records by direct data entry users and from provider EHR systems that send data to the NDIIS electronically. The vaccine level de-duplication system will automatically remove duplicates that can be easily identified as a duplicate dose (i.e. same vaccine/type of vaccine with the same dose date). Those doses that cannot be automatically de-duplicated are evaluated by immunization program staff on a daily basis. At a minimum, doses with an add date from the previous day will be resolved by the end of the current business day.

The NDDoH is also working on evaluating all historical dose records that were in the NDIIS prior to April 2014 to remove previously added vaccine duplicates. This clean-up is scheduled to be complete by December 31, 2014. Until that time, older records (those added prior to April 2014) with duplicate doses can be reported to the immunization program via phone and the records will be corrected every Tuesday and Thursday by the immunization program.

In an effort to reduce the number of vaccine duplicates created in the NDIIS, the NDDoH suggests that EHRs electronically consume, not just display, historical doses from the NDIIS into the EHR. This will reduce the number of vaccine duplicates, because providers won't have to manually enter historical doses from NDIIS into the EHR.